

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

SPRINT COMMUNICATIONS COMPANY L.P.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 18-361-RGA
	)	
WIDEOPENWEST, INC., WIDEOPENWEST	)	<b>JURY TRIAL DEMANDED</b>
NETWORKS, INC., and WIDEOPENWEST	)	
FINANCE, LLC,	)	
	)	
Defendants.	)	

**ANSWER OF DEFENDANTS WIDEOPENWEST, INC., WIDEOPENWEST  
NETWORKS, INC., AND WIDEOPENWEST FINANCE, LLC TO SPRINT  
COMMUNICATIONS COMPANY L.P.'S FIRST AMENDED COMPLAINT**

Defendants WideOpenWest, Inc., WideOpenWest Networks, Inc., and WideOpenWest Finance, LLC (collectively, “Defendants”), by and through their attorneys, answer the First Amended Complaint (“Complaint”) of Plaintiff Sprint Communication Company L.P. (“Sprint”) as follows:

**PARTIES**

1. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 1 of the Complaint and therefore deny these allegations.
2. WideOpenWest, Inc. admits the allegations in Paragraph 2 of the Complaint.
3. WideOpenWest Networks, Inc. admits the allegations in Paragraph 3 of the Complaint.
4. WideOpenWest Finance, LLC admits the allegations in Paragraph 4 of the Complaint.

5. Defendants admit that one or more their subsidiaries have provided and currently provide telephony services under marketing names WOW! Phone and WOW! Business. Defendants otherwise deny the allegations in Paragraph 5 of the Complaint.

### **JURISDICTION**

6. Defendants admit that the Complaint purports to bring an action for patent infringement under the United States Patent Laws, 35 U.S.C. § 271, *et seq.*, and that this Court has subject matter jurisdiction over such claims under 28 U.S.C. §§ 1331 and 1338(a), but Defendants deny the legal sufficiency of Sprint's allegations and that Sprint has any viable claim thereunder.

7. Defendants admit that each is incorporated or organized in the State of Delaware, but Defendants deny the legal sufficiency of Sprint's allegations and that Sprint has any viable claim thereunder.

### **VENUE**

8. Defendants admit that venue is proper in this judicial district, but to the extent the Complaint is later amended to add parties, Defendants reserve the right to challenge venue as to any added parties.

### **JOINDER**

9. Defendants admit that joinder is proper under 35 U.S.C. § 299, but to the extent the Complaint is later amended to add parties, Defendants reserve the right to challenge joinder of any added parties. Defendants deny the legal sufficiency of Sprint's allegations and that Sprint has any viable claim thereunder.

10. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 10 of the Complaint and therefore deny these allegations.

**FACTUAL BACKGROUND**

11. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 11 of the Complaint and therefore deny these allegations.

12. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 12 of the Complaint and therefore deny these allegations.

13. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 13 of the Complaint and therefore deny these allegations.

14. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 14 of the Complaint and therefore deny these allegations.

15. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 15 of the Complaint and therefore deny these allegations.

16. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 16 of the Complaint and therefore deny these allegations.

17. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 17 of the Complaint and therefore deny these allegations.

18. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 18 of the Complaint and therefore deny these allegations.

19. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 19 of the Complaint and therefore deny these allegations.

20. Defendants lack knowledge or information sufficient to form a belief as to the allegations of Paragraph 20 of the Complaint and therefore deny these allegations.

21. Defendants admit that U.S. Patent No. 6,343,084 (“the ’084 Patent”) states on its face that it issued on January 29, 2002; that the ’084 Patent is entitled “Broadband

Telecommunications System”; and that the named inventor on the ’084 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’084 Patent was attached as Exhibit A to the Complaint. Defendants deny that the ’084 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 21 of the Complaint and therefore deny those allegations.

22. Defendants admit that U.S. Patent No. 6,633,561 (“the ’3,561 Patent”) states on its face that it issued on October 14, 2003; that the ’3,561 Patent is entitled “Method, System and Apparatus for Telecommunications Control”; and that the named inventor on the ’3,561 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’3,561 Patent was attached as Exhibit B to the Complaint. Defendants deny that the ’3,561 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 22 of the Complaint and therefore deny those allegations.

23. Defendants admit that U.S. Patent No. 6,463,052 (“the ’052 Patent”) states on its face that it issued on October 8, 2002; that the ’052 Patent is entitled “Method, System and Apparatus for Telecommunications Control”; and that the named inventor on the ’052 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’052 Patent was attached as Exhibit C to the Complaint. Defendants deny that the ’052 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 23 of the Complaint and therefore deny those allegations.

24. Defendants admit that U.S. Patent No. 6,452,932 (“the ’932 Patent”) states on its face that it issued on September 17, 2002; that the ’932 Patent is entitled “Method, System and

Apparatus for Telecommunications Control”; and that the named inventor on the ’932 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’932 Patent was attached as Exhibit D to the Complaint. Defendants deny that the ’932 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 24 of the Complaint and therefore deny those allegations.

25. Defendants admit that U.S. Patent No. 6,473,429 (“the ’429 Patent”) states on its face that it issued on October 29, 2002; that the ’429 Patent is entitled “Broadband Telecommunications System”; and that the named inventor on the ’429 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’429 Patent was attached as Exhibit E to the Complaint. Defendants deny that the ’429 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 25 of the Complaint and therefore deny those allegations.

26. Defendants admit that U.S. Patent No. 6,298,064 (“the ’064 Patent”) states on its face that it issued on October 2, 2001; that the ’064 Patent is entitled “Broadband Telecommunications System”; and that the named inventor on the ’064 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’064 Patent was attached as Exhibit F to the Complaint. Defendants deny that the ’064 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 26 of the Complaint and therefore deny those allegations.

27. Defendants admit that U.S. Patent No. 6,330,224 (“the ’224 Patent”) states on its face that it issued on December 11, 2001; that the ’224 Patent is entitled “System and Method for Providing Enhanced Services for a Telecommunication Call”; that the named inventors on the ’224

Patent are Joseph Michael Christie and Tracy Lee Nelson; and that Joseph S. Christie and Jean M. Christie are listed on the '224 Patent as the legal representatives of the deceased Joseph Michael Christie. Defendants further admit that what appears to be a copy of the '224 Patent was attached as Exhibit G to the Complaint. Defendants deny that the '224 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 27 of the Complaint and therefore deny those allegations.

28. Defendants admit that U.S. Patent No. 6,697,340 ("the '340 Patent") states on its face that it issued on February 24, 2004; that the '340 Patent is entitled "System and Method for Providing Enhanced Services for a Telecommunication Call"; that the named inventors on the '340 Patent are Joseph Michael Christie and Tracy Lee Nelson; and that Joseph S. Christie and Jean M. Christie are listed on the '340 Patent as the legal representatives of the deceased Joseph Michael Christie. Defendants further admit that what appears to be a copy of the '340 Patent was attached as Exhibit H to the Complaint. Defendants deny that the '340 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 28 of the Complaint and therefore deny those allegations.

29. Defendants admit that U.S. Patent No. 7,286,561 ("the '6,561 Patent") states on its face that it issued on October 23, 2007; that the '6,561 Patent is entitled "Method System and Apparatus for Telecommunications Control"; and that the named inventor on the '6,561 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the '6,561 Patent was attached as Exhibit I to the Complaint. Defendants deny that the '6,561 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 29 of the Complaint and therefore deny those allegations.

30. Defendants admit that U.S. Patent No. 7,505,454 (“the ’454 Patent”) states on its face that it issued on March 17, 2009; that the ’454 Patent is entitled “Method, System and Apparatus for Telecommunications Control”; and that the named inventor on the ’454 Patent is Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’454 Patent was attached as Exhibit J to the Complaint. Defendants deny that the ’454 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 30 of the Complaint and therefore deny those allegations.

31. Defendants admit that U.S. Patent No. 7,327,728 (“the ’728 Patent”) states on its face that it issued on February 5, 2008; that the ’728 Patent is entitled “Broadband Telecommunications System”; that the named inventors on the ’728 Patent are Joseph Michael Christie, Albert D. Duree, Michael Joseph Gardner, William Lyle Wiley, Manu Chand Bahl, and Daniel Charles Sbisà; and that Joseph S. Christie and Jean M. Christie are listed on the ’728 Patent as the legal representatives of the deceased Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’728 Patent was attached as Exhibit K to the Complaint. Defendants deny that the ’728 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 31 of the Complaint and therefore deny those allegations.

32. Defendants admit that U.S. Patent No. 7,324,534 (“the ’534 Patent”) states on its face that it issued on January 29, 2008; that the ’534 Patent is entitled “Broadband Telecommunications System Interface”; that the named inventors on the ’534 Patent are Joseph Michael Christie, Michael Joseph Gardner, Tracy Lee Nelson, William Lyle Wiley, and Albert Daniel DuRee; and that Joseph S. Christie and Jean M. Christie are listed on the ’534 Patent as the

legal representatives of the deceased Joseph Michael Christie. Defendants further admit that what appears to be a copy of the '534 Patent was attached as Exhibit L to the Complaint. Defendants deny that the '534 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 32 of the Complaint and therefore deny those allegations.

33. Defendants admit that U.S. Patent No. 7,693,131 (“the '131 Patent”) states on its face that it issued on April 6, 2010; that the '131 Patent is entitled “Telecommunications System to Provide Analog Telephony Communications Over a Packet Connection”; and that the named inventors on the '131 Patent are Martin Joseph Kaplan, Frank Anthony DeNap, John Arndt Strand III, William Lee Edwards, Bryan Lee Gorman, Murat Bog, Michael Thomas Swink, and Harold Wayne Johnson. Defendants further admit that what appears to be a copy of the '131 Patent was attached as Exhibit M to the Complaint. Defendants deny that the '131 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 33 of the Complaint and therefore deny those allegations.

34. Defendants admit that U.S. Patent No. 6,563,918 (“the '918 Patent”) states on its face that it issued on May 13, 2003; that the '918 Patent is entitled “Telecommunications System Architecture for Connecting a Call”; and that the named inventors on the '918 Patent are Tracy Lee Nelson, William Lyle Wiley, Royal Dean Howell, Michael Joseph Gardner, and Albert Daniel DuRee. Defendants further admit that what appears to be a copy of the '918 Patent was attached as Exhibit N to the Complaint. Defendants deny that the '918 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 34 of the Complaint and therefore deny those allegations.



35. Defendants admit that U.S. Patent No. 6,999,463 (“the ’463 Patent”) states on its face that it issued on February 14, 2006; that the ’463 Patent is entitled “Number Portability in a Communications System”; that the named inventors on the ’463 Patent are Joseph Michael Christie, Michael Joseph Gardner, Albert Daniel DuRee, William Lyle Wiley, and Tracy Lee Nelson; and that Joseph S. Christie and Jean M. Christie are listed on the ’534 Patent as the legal representatives of the deceased Joseph Michael Christie. Defendants further admit that what appears to be a copy of the ’463 Patent was attached as Exhibit O to the Complaint. Defendants deny that the ’463 Patent was duly and legally issued. Defendants otherwise lack knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 35 of the Complaint and therefore deny those allegations.

36. Defendants admit that Sprint collectively refers to the patents identified in Paragraphs 21-35 of the Complaint and attached to the Complaint at Exhibits A-O as “Sprint’s Patents” or the “Asserted Patents.”

37. Defendants admit that WideOpenWest, Inc. is the parent corporation of both WideOpenWest Finance, LLC and WideOpenWest Networks, Inc. Defendants further admit that the website cited in Paragraph 37 of the Complaint (<https://ir.wowway.com/investor-relations/overview/>) states:

We are the sixth largest cable operator in the United States ranked by number of customers as of December 31. We provide high-speed data (“HSD”), cable television (“Video”), Voice over IP-based telephony (“Telephony”) and business-class services to a service area that includes approximately 3.0 million homes and businesses. . . . As of June 30, 2017, we had 776,500 customers who subscribe to our services.

Defendants otherwise deny the allegations in Paragraph 37 of the Complaint.

38. Defendants admit that one or more of their subsidiaries have provided and currently provide telephony services under marketing names WOW! Phone and WOW! Business. Defendants otherwise deny the allegations in Paragraph 38 of the Complaint.

39. Defendants admit that a letter from James Patterson, Vice President, Sprint Cable Solution, dated December 17, 2007, was sent to Colleen Abdoulah, 7887 East Bellevue Avenue, Suite 1000, Englewood, CO 80111. Defendants further admit that the letter stated that “Sprint successfully patented a great number of these innovations resulting in a portfolio of over 120 U.S. voice over packet (‘VoP’) patents.” Defendants further admit that the letter stated that “the jury found that Vonage infringed each asserted claim of every patent and ruled that Vonage should pay damages in an amount of \$69.5 million based on a rate of 5% of Vonage’s revenue.” Defendants further admit that the letter stated that “Sprint will protect the technology utilized by its cable partners and will aggressively enforce its intellectual property against all unauthorized use.” Defendants otherwise deny the allegations in Paragraph 39 of the Complaint.

40. Denied.

41. Each Defendant denies that it has made, used, offered to sell, and/or sold and continues to make, use, sell, and/or offer to sell telephony services, including WOW! Phone and WOW! Business, within the United States. Defendants admit that one or more of their subsidiaries have provided and currently provide telephony services under marketing names WOW! Phone and WOW! Business, in the United States. Defendants otherwise deny the allegations in Paragraph 41 of the Complaint.

42. Defendants admit that one or more of their subsidiaries have provided and still provide VoIP telephony services that are capable of placing calls to, and receiving calls from, the PSTN. Defendants otherwise deny the allegations in Paragraph 42 of the Complaint.

A. Denied.

B. Denied.

C. Denied.

43. Denied.

44. Denied.

45. Denied.

46. Denied.

47. Denied.

48. Denied.

49. Denied.

50. Denied.

51. Denied.

52. Denied.

53. Denied.

54. Denied.

55. Denied.

56. Denied.

57. Denied.

58. Denied.

59. Denied.

60. Denied.

61. Denied.

62. Denied.

63. Denied.

64. Denied.

65. Denied.

66. Denied.

**COUNT 1: PATENT INFRINGEMENT**  
**Infringement of the '084 Patent**

67. Paragraph 67 of the Complaint realleges and incorporates by reference Paragraphs 1-66 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-66 of Sprint's Complaint.

68. Denied.

69. Denied.

70. Denied.

**COUNT 2: PATENT INFRINGEMENT**  
**Infringement of the '3,561 Patent**

71. Paragraph 71 of the Complaint realleges and incorporates by reference Paragraphs 1-70 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-70 of Sprint's Complaint.

72. Denied.

73. Denied.

74. Denied.

75. Denied.

76. Denied.

**COUNT 3: PATENT INFRINGEMENT**  
**Infringement of the '052 Patent**

77. Paragraph 77 of the Complaint realleges and incorporates by reference Paragraphs 1-76 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-76 of Sprint's Complaint.

78. Denied.

79. Denied.

80. Denied.

81. Denied.

**COUNT 4: PATENT INFRINGEMENT**  
**Infringement of the '932 Patent**

82. Paragraph 82 of the Complaint realleges and incorporates by reference Paragraphs 1-81 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-81 of Sprint's Complaint.

83. Denied.

84. Denied.

85. Denied.

86. Denied.

**COUNT 5: PATENT INFRINGEMENT**  
**Infringement of the '429 Patent**

87. Paragraph 88 of the Complaint realleges and incorporates by reference Paragraphs 1-86 of the Complaint, to which no response is required. To the extent a response is required,

Defendants reallege and incorporate by reference their responses to Paragraphs 1-86 of Sprint's Complaint.

88. Denied.

89. Denied.

90. Denied.

91. Denied.

**COUNT 6: PATENT INFRINGEMENT**  
**Infringement of the '064 Patent**

92. Paragraph 92 of the Complaint realleges and incorporates by reference Paragraphs 1-91 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-91 of Sprint's Complaint.

93. Denied.

94. Denied.

95. Denied.

96. Denied.

**COUNT 7: PATENT INFRINGEMENT**  
**Infringement of the '224 Patent**

97. Paragraph 97 of the Complaint realleges and incorporates by reference Paragraphs 1-96 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-96 of Sprint's Complaint.

98. Denied.

99. Denied.

100. Denied.

**COUNT 8: PATENT INFRINGEMENT**  
**Infringement of the '340 Patent**

101. Paragraph 101 of the Complaint realleges and incorporates by reference Paragraphs 1-100 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-100 of Sprint's Complaint.

102. Denied.

103. Denied.

104. Denied.

**COUNT 9: PATENT INFRINGEMENT**  
**Infringement of the '6,561 Patent**

105. Paragraph 105 of the Complaint realleges and incorporates by reference Paragraphs 1-104 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-104 of Sprint's Complaint.

106. Denied.

107. Denied.

108. Denied.

**COUNT 10: PATENT INFRINGEMENT**  
**Infringement of the '454 Patent**

109. Paragraph 109 of the Complaint realleges and incorporates by reference Paragraphs 1-108 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to paragraphs 1-108 of Sprint's Complaint.

110. Denied.

111. Denied.

112. Denied.

**COUNT 11: PATENT INFRINGEMENT**  
**Infringement of the '728 Patent**

113. Paragraph 113 of the Complaint realleges and incorporates by reference Paragraphs 1-112 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-112 of Sprint's Complaint.

114. Denied.

115. Denied.

116. Denied.

**COUNT 12: PATENT INFRINGEMENT**  
**Infringement of the '534 Patent**

117. Paragraph 117 of the Complaint realleges and incorporates by reference Paragraphs 1-116 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-116 of Sprint's Complaint.

118. Denied.

119. Denied.

120. Denied.

**COUNT 13: PATENT INFRINGEMENT**  
**Infringement of the '131 Patent**

121. Paragraph 121 of the Complaint realleges and incorporates by reference Paragraphs 1-120 of the Complaint, to which no response is required. To the extent a response is required,



Defendants reallege and incorporate by reference their responses to Paragraphs 1-120 of Sprint's Complaint.

122. Denied.

123. Denied.

124. Denied.

**COUNT 14: PATENT INFRINGEMENT**  
**Infringement of the '918 Patent**

125. Paragraph 125 of the Complaint realleges and incorporates by reference Paragraphs 1-124 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-124 of Sprint's Complaint.

126. Denied.

127. Denied.

128. Denied.

**COUNT 15: PATENT INFRINGEMENT**  
**Infringement of the '463 Patent**

129. Paragraph 129 of the Complaint realleges and incorporates by reference Paragraphs 1-128 of the Complaint, to which no response is required. To the extent a response is required, Defendants reallege and incorporate by reference their responses to Paragraphs 1-128 of Sprint's Complaint.

130. Denied.

131. Denied.

132. Denied.

### **AFFIRMATIVE DEFENSES**

Further answering the Complaint and as additional defenses thereto, Defendants assert the following affirmative defenses.

### **FACTS RELEVANT TO AFFIRMATIVE DEFENSES**

#### **A. Introduction**

133. It was not so long ago that nearly all landline voice communications took place almost exclusively over conventional telephone wires using antiquated telephone company technologies. A local telephone company provided a dedicated twisted-pair telephone wire—known as the local loop—from a circuit switch in a central office to the customer home. That circuit switch would work with other circuit switches as necessary to connect the customer calls. These telephone company technologies required that a dedicated end-to-end path be established on a call-by-call basis between the calling and called parties. When a long-distance call was made, the circuit switch of the local telephone company would work with the circuit switches of a long-distance telephone company to set up the dedicated path for that call. The aggregate of all of the circuit switched-based telephone company networks is known as the Public Switched Telephone Network (PSTN).

134. At the time of the alleged inventions of the patents-in-suit, Sprint was primarily in the long-distance telephone businesses. It was a long-distance telephone company.

135. In the 1990s, Sprint initiated a project to move its long-distance traffic off of its circuit switched network. Sprint wanted to use a different telephone company technology called Asynchronous Transfer Mode (ATM) to carry long-distance calls. Like other telephone company technologies, ATM requires that a dedicated path be established on a call-by-call basis for every call. At the time the project began, Sprint had already built out a large ATM network, but that network was being used only to provide data services. Sprint's objective was to use its existing

ATM data network as its long-distance telephone network. Sprint expended substantial financial and personnel resources on that project.

136. Notwithstanding the substantial financial and personnel resources Sprint expended on this project, its efforts to adapt its ATM network for use as a long-distance telephone network were unsuccessful. Sprint never did use an ATM network as its long-distance telephone network. Sprint's entire ATM telephony project was an abject failure.

137. Sprint's claims in this case relate, *inter alia*, to two groups of patents that Sprint obtained as part of these efforts to adapt its ATM network to serve as a long-distance telephone network. While both groups of patents relied on ATM technology, they offered very different solutions to purported problems associated with establishing call-by-call communications paths that traversed both circuit-switched networks and ATM networks.

138. According to the disclosure of the first group of patents (hereinafter the "Group 1 Patents"), the purported invention sought to establish the ATM portion of the end-to-end communications path by signaling ATM "switches." In contrast, the purported invention disclosed in the second group of patents (hereinafter the "Group 2 Patents") would not signal ATM switches, but rather would signal an ATM "interworking multiplexer."

139. Sprint obtained both groups of patents through fraud on the U.S. Patent and Trademark Office ("PTO").

140. In the specification of the Group 1 Patents, Sprint told the PTO that the types of ATM switches those patents required already existed as off-the-shelf products. Therefore, the logic went, there was no need for Sprint to describe how to make such a switch, and the specification does not describe how to make such a switch. But as Sprint knew full well, such ATM switches did *not* already exist.

141. In *simultaneously* prosecuting the Group 2 Patents, Sprint told the PTO that such ATM switches were still under development, and it was specifically *because* such switches did not exist that the invention described by the Group 2 Patents was necessary, novel and non-obvious.

142. Sprint's ATM telephony project was based on the Group 2 Patent technology precisely because the ATM switches relied on in the Group 1 Patents did not exist and could not be used.

143. Sprint thus obtained the Group 1 Patents based on patently false representations, and it obtained the Group 2 Patents by directly contradicting the representations it had made to obtain the Group 1 Patents. Sprint wanted to have its cake and eat it too.

144. Sprint's fraud on the PTO did not stop there. Sprint cancelled its ATM telephony project in 1999. Sprint filed its initial application for the Group 2 Patents in 1995, and three continuation applications between 1999 and 2000. In prosecuting the continuation applications, Sprint failed to disclose that Sprint spent nearly two-hundred million dollars on its failed ATM telephony project trying to get the technology of the Group 2 Patents to work but was unsuccessful. Indeed, on information and belief, Sprint was unable to make the technology of the Group 2 Patents work on any scale when attached to live networks to handle real telephone calls, which is the entire alleged purpose of the purported invention of the Group 2 Patents. According to Sprint's Complaint, the purported invention "leverage[s] the efficiencies of packet-based networks to make telephone calls to and from the PSTN."

145. Sprint thus knew when submitting the continuation applications for the Group 2 Patents that the invention could not be made without undue experimentation, yet remarkably failed to inform the PTO of that critical fact.

146. Sprint's fraud extended beyond the Group 1 and Group 2 Patents. Another patent-in-suit, the '131 Patent, issued in April 2010 as a result of a continuation application from two earlier applications separate from the Group 1 and 2 Patents. The specifications for the earlier applications focused entirely on the use of ATM and DSL telephone company technologies, but Sprint dramatically changed the specification for the '131 Patent, expanding the scope to cover communications over all "packet networks" and "packet connections," including "Internet communications over the packet connection." These changes were improper under 37 C.F.R. §§ 1.53(b), 1.63(d), and 1.67, which at all relevant times prohibited the introduction of new matter into the specification of a continuation application. Sprint committed fraud by failing to alert the PTO to the material changes.

**B. Sprint Fraudulently Procured the Group 1 Patents-in-Suit by Falsely Representing to the PTO That the ATM Switches Relied Upon by the Disclosed Invention Already Existed and Were Commercially Available**

147. At all relevant times, Sprint in-house patent attorney Harley R. Ball was responsible for all patent filing and prosecution activities within Sprint. Other patent attorneys and patent agents that filed and prosecuted patent applications on Sprint's behalf operated at Mr. Ball's direction and reported, directly or indirectly, to Mr. Ball. Mr. Ball was responsible for all of the patent filing and prosecution activities relevant to these Affirmative Defenses.

148. Sprint filed its initial application related to the Group 1 Patents on May 5, 1994 (Application No. 08/238,605). Sprint filed a continuation application on December 7, 1995 (Application No. 08/568,551). The initial application was ultimately abandoned, but the continuation application was granted on October 20, 1998, issuing as Patent No. 5,825,780 ("the '780 Group 1 Patent").

149. Sprint filed a series of additional continuation applications from 1998 to 2006, including for what would become the '052 Patent, the '932 Patent, the '3,561 Patent, the '6,561 Patent, the '454 Patent, which comprise some of the patents-in-suit (“Group 1 Patents-in-Suit”).

150. Each of the Group 1 Patents carries a claimed priority date of May 5, 1994, the date of the original application. The following table provides an overview of the relevant Group 1 Patents:

<b>Group 1 Patents</b>				
Patent Number	Application Date	Issuance Date	Patent-in-Suit?	Claimed Priority Date
N/A (Appl. No. 08/238,605)	5/5/1994	N/A	No	N/A
5,825,780	12/7/1995	10/20/1998	No	5/5/1994
6,463,052	5/20/1998	10/1/2002	Yes	5/5/1994
6,452,932	2/7/2000	9/17/2002	Yes	5/5/1994
6,633,561	11/14/2001	10/14/2003	Yes	5/5/1994
7,286,561	8/4/2003	10/23/2007	Yes	5/5/1994
7,505,454	11/17/2006	3/17/2009	Yes	5/5/1994

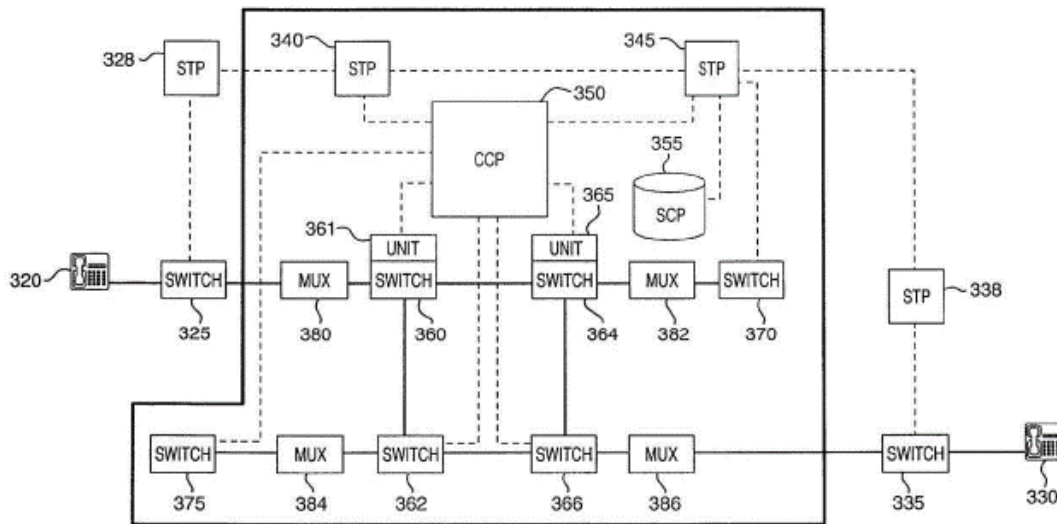
151. In the original May 1994 application for the Group 1 Patents, Sprint—through Harley Ball, Sprint patent agent Michael Setter (who worked for Mr. Ball), and named inventor Joseph Michael Christie—explained that the telecommunications systems to which the invention relates require that a fixed “communications path” be established for every call, and that “communication control” refers to the process of setting up that communications path using signaling. Sprint explained that “switches” both performed the communication control function of setting up the communications path and served as part of the communications path.

152. The May 1994 application explains that both ATM switches and circuit switches perform the communication control function by signaling one another at the start of the call: the first switch would select a second switch in the network to be included in the communications path and would transmit a signal to that switch; the second switch would process that signal and in turn select and signal a third switch; and so on.

153. Sprint asserted that reliance on switches to both set up the communications path and form a part of that path created problems when the path had to span broadband (ATM) and narrowband (PSTN) networks, because “[a]t present, the ability” of broadband switches to signal narrowband switches (and vice-versa) as “require[d]” to set up such paths “is limited.”

154. The alleged inventions of the Group 1 Patents purport to solve this problem by transferring some responsibility for setting up the path from the switches to a new device called a “*Communication Control Processor*” (CCP)—named for its function of setting up the communications path. The CCP would have the ability to signal both circuit switches and ATM switches, such that an ATM switch would not have to signal a circuit switch (or vice-versa) in order to establish a communications path for a call that spans both ATM and circuit switched networks.

155. Figure 3 of the Group 1 Patents’ specification, reproduced below, illustrated how the process purportedly would work. Network elements 360, 362, 364, and 366 represent ATM switches, while elements 325 and 335, 370 and 375 represent circuit switches. In the Figure 3 example, a caller at phone 320 would place a call to phone 330, and a path for the call through switches 325, 360, 364, 370, 364, 366 and 335 would be established using signaling from the CCP to both ATM and circuit switches.

**FIG. 3**

156. As shown in the figure, signaling links (indicated by the dashed lines) exist between the CCP and every ATM switch and between the CCP and every circuit switch. A key to this invention was that the ATM switches could receive and process signaling information from the CCP, as well as from other ATM switches, as required to establish a communications path for each call.

157. Critically, Sprint—through Mr. Ball, Mr. Setter and Mr. Christie—repeatedly told the PTO that ATM switches capable of receiving and processing signaling to set up a communications path already existed as of the claimed priority date, and that the only new device required to operationalize Figure 3 was the CCP. Sprint asserted that, “[a]side from the CCP,” the network elements depicted in Figure 3—including the ATM switches 360, 362, 364, and 366—were “familiar to one skilled in the art,” and that “examples of these network elements” included “the Fore Systems ASX-100,” which purportedly was a commercially available example of the ATM switch depicted in Figure 3. The specification does not describe how to make the ATM switch relied upon by the invention, but Sprint’s representation that these switches were commercially available



conveyed to the examiner that such a description was not required, because “[a] patent need not teach, and preferably omits, what is well known in the art.” M.P.E.P. § 2164.01.

158. Sprint made and repeated this representation on 12/7/1995, 5/20/1998, 2/7/2000, 11/14/2001, 8/4/2003 and 11/17/2006—each time Sprint filed an application leading to a Group 1 Patent. These representations were false when made. ATM switches did not exist as of the claimed priority date that could receive and process signaling as required by Figure 3 of the Group 1 Patents.

159. Mr. Ball, Mr. Setter and Mr. Christie knew that ATM switches with the functionality required by the Group 1 Patents did not exist when these misrepresentations were made in the applications for the Group 1 Patents. Several months before submitting the December 1995 continuation application that resulted in the ’780 Group 1 Patent, they submitted Sprint’s first application for the Group 2 Patents. They asserted in the applications for the Group 2 Patents that ATM switches with the functionality required by the Group 1 Patents did not exist.

160. Specifically, on September 8, 1995, Sprint—again through Mr. Ball, Mr. Setter and Mr. Christie—submitted an application which resulted in Patent No. 5,991,301 (“the ’301 Group 2 Patent”). These are the same three individuals who submitted the original 1994 application for the Group 1 Patents and the December 1995 continuation application for the ’780 Group 1 Patent.

161. Sprint explained in the application for the ’301 Group 2 Patent that ATM switches which can process signaling to set up call-by-call ATM communications paths—called switched virtual circuits, or “SVCs”—were still under development and would have to be “very sophisticated” when they were ultimately developed:

ATM switches *are being developed* that can process calls in response to signaling to provide virtual connections for each call. These systems cause problems because they must be *very sophisticated* to support current networks. . . . This generation of sophisticated ATM switches is not yet mature and should be expensive *when they are first deployed*.

In other words, Sprint's representation in the Group 1 Patents notwithstanding, ATM switches which process signaling did *not* already exist and were *not* already commercially available. Because Mr. Ball, Mr. Setter and Mr. Christie prepared and filed the application for the '301 Group 2 Patent before they filed any of the applications for any of the Group 1 Patents, they necessarily knew when they filed the applications for the Group 1 Patents that their representations that the ATM switches existed were false.

162. Sprint violated its duty of candor under, *inter alia*, 37 C.F.R. § 1.56, including the duty to disclose material information, in prosecuting the Group 1 Patents-in-Suit.

163. Mr. Ball, Mr. Setter and Mr. Christie represented to the PTO in the original 1994 priority application for the Group 1 Patents that ATM switches already existed that could receive and process signaling as required to establish an ATM communications path on a call-by-call basis. That representation was false.

164. Mr. Ball, Mr. Setter and Mr. Christie each knew that representation was false when they repeated it in Sprint's continuation applications for the Group 1 Patents. In those continuation applications, Sprint sought and received a priority date of May 5, 1994, the date of the original priority application, despite knowing that the original application contained material misstatements and that the ATM switches did not exist as of May 5, 1994. Neither Mr. Ball nor anyone else ever corrected these material misstatements. Nor did Mr. Ball or anyone else ever advise the PTO during prosecution of the Group 1 Patents that Sprint was simultaneously prosecuting the Group 2 Patents on the diametrically opposite premise that ATM switches which can process signaling did not exist.

165. On information and belief, the false representations made in the applications for the Group 1 Patents-in-Suit were knowing and intentional. These misrepresentations constitute

egregious misconduct. Every Group 1 Patent-in-Suit was filed *after* the September 8, 1995 filing of the application for the '301 Group 2 Patent that contained Sprint's admissions that its representations in the Group 1 Patents' specification were false.

166. The false representations and omissions were also material. Had the PTO known the truth, it would have found that the Group 1 Patents-in-Suit failed to meet the written description and enablement requirements of 35 U.S.C. § 112. All of these patents included claims when first filed and throughout their prosecution that required a "packet communication system," an "asynchronous communication system," a "packet system," a "packet switch," or a "broadband network," each of which requires the non-existent ATM switch for written description support and enablement. And all of the claims of these patents as issued require a "packet communication system," an "asynchronous communication system," a "packet system" or a "broadband network," each of which requires the non-existent ATM switch for written description support and enablement. The only disclosed embodiments relevant to these claims require and rely upon the non-existent ATM switches.

167. The written description requirement mandates that the specification "contain a written description of the invention, and of the manner and process of making and using it, in . . . full, clear, concise, and exact terms." This requirement "serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed." *Capon v. Eshhar*, 418 F.3d 1349, 1357 (Fed. Cir. 2005).

168. The enablement requirement dictates that—at the time of the patent application—any person skilled in the art be able to make and use the invention without undue experimentation.

169. If the PTO had known that, at the time of the original application, the ATM switches relied on in the Group 1 Patents did not exist, the PTO would have recognized that the named inventor—Mr. Christie—did not and could not possibly possess the claimed invention of the Group 1 Patents-in-Suit, and the PTO would have found that those claims failed the written description requirement. And the PTO would have found that the enablement requirement was not met as well; the invention clearly would have required undue experimentation as of May 1994—by Sprint’s own admission in the Group 2 Patents, the Group 1 Patents-in-Suit relied on “very sophisticated” equipment that did not yet exist, but that was required to operationalize the only disclosed embodiments of the claims.

170. Thus, but for Sprint’s fraud, the PTO would not have issued the Group 1 Patents-in-Suit. For all of the above reasons, the Group 1 Patents-in-Suit are unenforceable.

**C. Sprint Fraudulently Procured the Group 2 Patents-in-Suit by Incorporating by Reference the Misrepresentations It Made in the Group 1 Patents**

171. The Group 2 Patents-in-Suit are the ’429 Patent, ’084 Patent, and the ’064 Patent.

172. Sprint—through Mr. Ball, Mr. Setter and Mr. Christie—explained in the specification of the Group 2 Patents that “[t]hose skilled in the art are well aware of the efficiencies created by using SVPs and SVCs as opposed to PVCs [permanent virtual circuits] and PVPs. SVCs and SVPs utilize bandwidth more efficiently.” Moreover, unlike SVCs, PVCs cannot be established on a call-by-call basis. However, Sprint explained, establishing SVCs requires use of ATM switches that can process signaling. Such switches, Sprint said, did not exist, and would have to be “very sophisticated” when they were first developed.

173. There was therefore a purported need for a less sophisticated alternative “that can provide ATM switching on a call by call basis without relying on the call processing and signaling capability of an ATM switch.” That is the purported solution disclosed in the Group 2 Patents.

Rather than establish SVCs on a call-by-call basis by signaling ATM switches, the Group 2 Patents' specification contemplates pre-establishing many different PVCs throughout an ATM network on a fixed (not call-by-call) basis. An "ATM interworking multiplexer" would then be signaled on a call-by-call basis to simply select one of those fixed pre-existing PVCs. While using PVCs was disadvantageous for the reasons the specification explained, this solution required much less "sophistication" than the as-yet undeveloped ATM switches.

174. The purported invention of the Group 2 Patents was thus, in effect, a stopgap measure pending the development of ATM switches by others.

175. But Sprint—and Mr. Ball in particular—was not satisfied with obtaining patent claims on that stopgap measure. It wanted to obtain claims that were much broader. It wanted to obtain claims that did not require use of PVCs. To accomplish this, Mr. Ball had to rely on the misrepresentations Sprint made in the Group 1 Patents—and the Group 1 Patents' embodiments predicated on those misrepresentations—for written description support, because the Group 1 Patents, unlike the Group 2 Patents, were not predicated upon use of PVCs. Sprint therefore purported to incorporate the entirety of the Group 1 Patents' specification—including the misrepresentations it made in that specification—into each of the Group 2 Patents by reference:

This application is a continuation of pending U.S. patent application Ser. No. 08/525,897, entitled "Broadband Telecommunications System", filed on Sep. 8, 1995 now U.S. Pat. No. 5,991,301, which is incorporated by reference into this application, and which is a continuation-in-part application Ser. No. 08/568,551 filed Dec. 7, 1995 now *U.S. Pat. No. 5,825,780 entitled "Method, System, and Apparatus for Telecommunications Control"*, which is incorporated by reference into this application, and which is a continuation of U.S. patent application Ser. No. 08/238,605 filed May 3, 1994.

176. Mr. Ball, Mr. Setter and Mr. Christie intentionally incorporated the misrepresentations it made in the Group 1 Patents' specification into the Group 2 Patents' specification, knowing full well at the time that those representations were false. This would allow

them to later rely on these misrepresentations as support for broad claims that were not limited to the use of PVCs. This constitutes affirmative egregious misconduct.

177. Sprint's misconduct was also material. If Sprint had not incorporated the Group 1 Patents' embodiments—and the misrepresentations upon which those embodiments were predicated—into the Group 2 Patents, the PTO would have rejected the Group 2 Patents' claims for failure to comply with the written description requirement, and in particular for failure to describe any claim that was not limited to the use of PVCs. On information and belief, Sprint will contend that *none* of the asserted claims of the Group 2 Patents-in-Suit are limited to the use of PVCs.

178. And just as Sprint—and Mr. Ball in particular—had planned when it incorporated the false statements and unworkable embodiments of the Group 1 Patents' specification into the Group 2 Patents, Sprint would later rely on the incorporation by reference to argue that the Group 1 Patents' specification provides the necessary written description support for the Group 2 Patents' claims. This is exactly the position Sprint and its expert argued to the jury in the case captioned *Sprint Communications Co. L.P. v. Time Warner Cable Inc., et al.*, Case No. 11-cv-2686-JWL (D. Kan.). And the court in that case relied on the incorporation by reference to deny the defendants' motion for judgement as a matter of law that the Group 2 Patents' claims lack written description, finding that “there is no basis to preclude consideration of the [Group 1 Patents'] specification in determining the validity of the [Group 2] Patents.”

179. For all of these reasons, the Group 2 Patents-in-Suit are unenforceable.

**D. Sprint Failed to Disclose That It Could Not Get the Group 2 Patents' Technologies to Work Even After Investing Over \$190 Million**

180. Sprint independently committed fraud in obtaining the Group 2 Patents-in-Suit in failing to disclose to the PTO that it could not get the technology of the Group 2 Patents to work even after investing over \$190 million.

181. In the mid-1990's, Sprint launched an internal project, known as JCS2000, to integrate Sprint's voice and data network onto Sprint's existing ATM infrastructure, so as to use Sprint's existing ATM data network as its long-distance telephone network. Sprint attempted to use the technologies of the Group 2 Patents to accomplish this goal.

182. Sprint recognized that it could not use the disclosed invention of the Group 1 Patents for the JCS2000 project because the ATM switches that invention relied on did not exist.

183. Sprint spent substantial resources on the JCS2000 initiative in the years following its launch. In total, Sprint spent roughly \$194 million on the initiative (the equivalent of almost \$300 million in today's dollars) from its launch until its termination.

184. Sprint cancelled the JCS2000 initiative in or around 1999.

185. Sprint cancelled the initiative because it was unable to successfully develop and deploy the technologies of the Group 2 Patents despite having dedicated enormous resources to the effort. On information and belief, Sprint was never able to operate the technology of the Group 2 Patents using actual PSTN and ATM networks. Indeed, on information and belief, Sprint was unable to make the technology of the Group 2 Patents work on any scale when attached to live networks to handle real telephone calls, which is the entire alleged purpose of the purported invention of the Group 2 Patents. According to Sprint's Complaint, the purported invention "leverage[s] the efficiencies of packet-based networks to make telephone calls to and from the PSTN."

186. The Sprint patent department, and Mr. Ball in particular, was aware of the JCS2000 project and kept abreast of its status. On information and belief, Mr. Ball was aware of the resources Sprint had dedicated to the project and he was aware that the project had failed.

187. Even after trying and failing to implement the technologies covered by the Group 2 Patents, Sprint—through Mr. Ball and others working under his direction and control—filed a series of continuation applications for the Group 2 Patents. The following table provides an overview of the relevant Group 2 Patents:

<b>Group 2 Patents</b>			
Patent Number	Application Date	Issuance Date	Patent-in-Suit?
5,991,301	9/8/1995	11/23/1999	No
6,473,429	7/15/1999	10/29/2002	Yes
6,343,084	11/12/1999	1/29/2002	Yes
6,298,064	2/25/2000	10/2/2001	Yes

188. Sprint (including Mr. Ball in particular) did not disclose the failure of the JCS2000 initiative in its application for, or prosecution of, any of the Group 2 Patents-in-Suit, the applications for which were all filed in 1999 or 2000. Nor did Sprint (including Mr. Ball in particular) disclose the time, effort, and resources it was required to invest as part of the JCS2000 initiative since the original Group 2 Patent application was filed in 1995. Sprint (including Mr. Ball in particular) failed to disclose that, despite having spent several years and enormous resources trying to implement the Group 2 Patents since the original 1995 application, Sprint had been unable to successfully develop and deploy the technology of the Group 2 Patents.

189. These omissions violated Sprint's duty to disclose material information under, *inter alia*, 37 C.F.R. § 1.56.



190. On information and belief, Sprint's failure to disclose the massive resources that were unsuccessfully expended on the JCS2000 initiative was knowing and intentional. This failure constitutes egregious misconduct.

191. This failure to disclose was also material; had it known these undisclosed facts, the PTO would have found that the Group 2 Patents did not meet the enablement requirement of 35 U.S.C. § 112, which requires that any person skilled in the art be able to make and use the invention without undue experimentation. The PTO would have found that the Group 2 Patents required undue experimentation given that Sprint itself had experimented with the technologies for five years, at a cost of over \$190 million, and still could not get them to work.

192. Indeed, even if this massive effort had ultimately been successful, it still would demonstrate that undue experimentation was required to practice the Group 2 Patents. Thus, even if the exorbitant resources expended on this effort had ultimately resulted in an operational, live ATM long-distance network, Sprint still would have had the obligation to disclose to the PTO the details of the effort required to accomplish that feat. But Sprint made no such disclosure to the PTO, intentionally withholding material information that bore directly on patentability.

193. For these additional reasons, the Group 2 Patents-in-Suit are unenforceable.

#### **E. Sprint Fraudulently Added New Matter to the '131 Patent Specification**

194. The '131 Patent, which is not one of the Group 1 or Group 2 Patents, purports to claim, *inter alia*, "a method of operating a communication system to provide Public Switched Telephone Network (PSTN) access to a residential communication hub," through a "residential communication hub that is coupled to a packet network over a packet connection." The application for the '131 Patent was a continuation application of Application No. 09/650,560 (now Patent No. 6,829,234 ("the '234 Patent")), which in turn was a continuation application of Application No. 08/826,641 (now Patent No. 6,141,339 ("the '339 Patent")).

195. Pursuant to, *inter alia*, 37 C.F.R. §§ 1.53(b), 1.63(d), and 1.67, as in effect at all relevant times, a continuation application that claims the benefit of the filing date of a parent application may not introduce new matter to the specification of the parent. Rather, if a continuing application contains new matter, it must be filed as a continuation-in-part application. A party filing a continuation-in-part application must disclose any intervening art in the years between the parent application and the continuation-in-part application. 37 C.F.R. § 1.56(e).

196. In its continuation application for the '131 Patent, Sprint flagrantly violated the prohibition on adding new matter to the specification. Sprint fraudulently filed the application as a continuation application rather than as a continuation-in-part application, despite having added new matter, in order to obtain the benefit of the original filing date for all of its claims. The individuals who committed this misconduct on Sprint's behalf include patent attorneys Mr. Ball, Mr. Setter, and David J. Bovitz.

197. Sprint filed its application for what became the '339 Patent on April 4, 1997. Sprint filed its continuation application for what became the '234 Patent on August 30, 2000. In each of those applications, Sprint provided the following Summary of the Invention:

The invention is a communications system for providing communications services to an end user at a residence. The communications system comprises: a residential communications hub, a network multiplexer, telephone wiring, a service node, a broadband metropolitan area network ring, and a broadband wide area network ring.

The residential communications hub is located at the residence. It is comprised of a plurality of communications interfaces that communicate with a plurality of end-user communications devices that are located in the residence and that use a plurality of communications formats. *The communications interfaces convert between the communications formats and an ATM format.* At least one of the communications interfaces is an analog telephony interface that communicates with a telephone that is located in the residence and that uses an analog telephony format. *The analog telephony interface converts between the analog telephony format and the ATM format. The residential communications hub is further comprised of a Digital Subscriber Line (DSL) interface that is coupled to the communications interfaces. It communicates with the communications system using an ATM over DSL format.*

The network multiplexer converts between the *ATM over DSL format* and an ATM over broadband format. The telephone wiring connects the residential communications hub and the network multiplexer and carries the *ATM over DSL format*. The service node receives and processes end-user communications service requests and initiates the establishment of *ATM* communications paths to support the service requests. The broadband metropolitan area network ring provides *ATM* over broadband communications paths between the network multiplexer and the service node. The broadband wide area network ring is connected to the service node and provides *ATM* over broadband communications paths to the service node.

In some embodiments of the invention, the communications system further comprises: a second service node that is connected to the broadband wide area network ring, a second broadband metropolitan area network ring that is connected to the second service node, a second network multiplexer that is connected to the broadband metropolitan area network ring, a second residential hub that is located at a second residence to provide services to a second end-user, and second telephone wiring that connects the second network multiplexer to the second residential hub. *The communications system is operational to provide a voice over ATM connection* between the residential hubs in response to a service request directed to one of the service nodes.

198. In these earlier specifications, Sprint thus focused exclusively on the use of ATM and DSL technology. Consistent with this disclosure, all of the claims of the '339 and '234 Patents are expressly limited to ATM and/or DSL technologies. Not coincidentally, Sprint is not asserting those patents in this action.

199. When Sprint—through Mr. Ball, Mr. Setter and Mr. Bovitz—filed the continuation application for what became the '131 Patent on July 20, 2004, however, Sprint attempted to broaden the specification to cover all “packet networks” and “packet connections,” including “Internet communications over the packet connection.”

200. Specifically, Sprint provided the following Summary of the Invention in its application for what became the '131 Patent:

A communication system provides PSTN access to a user device coupled to a *packet network over a packet connection*. The user device exchanges telephony signaling and telephony communications in an analog format with an analog telephone, exchanges the telephony signaling and the telephony communications *in the packet format over the packet connection*, and exchanges *Internet communications over the packet connection*. A service node exchanges the telephony signaling in the *packet format* with the user device, processes the telephony signaling to select a PSTN connection, transfers a control message

indicating the PSTN connection, and exchanges the telephony signaling in a PSTN format with the PSTN. An interworking unit receives the control message, and in response, exchanges the telephony communications in the *packet format* with the user device and exchanges the telephony communications in the PSTN format with the selected PSTN connection.

201. In the continuation application for the '131 Patent, Sprint thus plainly added substantial new matter, in violation of, *inter alia*, 37 C.F.R. §§ 1.53(b), 1.63(d), and 1.67, and Federal Circuit precedent applying those provisions. Worse, Sprint failed to alert the PTO to the changes in the specification in its continuation application.

202. The claims of the '131 Patent, unlike the claims of the '339 and '234 Patents, are not expressly limited to either ATM or DSL.

203. Sprint relied upon the new language in the specification to overcome the patent examiner's initial rejection of certain claims. For instance, the examiner initially rejected a handful of Sprint's claims for the '131 Patent, including Claim 11, which is the claim that Sprint alleges Defendants infringed upon here. The examiner had initially rejected these claims for failure to meet the enablement requirements. To address the examiner's objections, Sprint pointed the examiner to the new Summary of the Invention language, asserting that "the description of [an enabled] interworking unit is discussed in several embodiments as found [in the new Summary of the Invention]," among other places. The examiner ultimately allowed the initially rejected claims.

204. On information and belief, Sprint's clandestine modifications to the specification were knowing and intentional. Sprint added this new matter because it had observed the growth of IP networks in the years since the two earlier applications, and it sought to use the '131 Patent as a means to improperly expand and backdate the reach of its patents to cover this technology. Sprint thus wrongfully designated the new specification a "continuation" instead of a "continuation-in-part" to mislead the Patent Office into believing no new matter had been added and thereby obtain the benefit of the original application date for all of the new claims. This was affirmative egregious

misconduct. On information and belief, Mr. Ball was the architect behind this scheme, as it was he who architected Sprint's global program of using improper means to obtain patent claims having far broader/different scope than the purported ATM inventions actually conceived and disclosed by Sprint's inventors.

205. Sprint's clandestine modifications to the specification were also material; the PTO would not have granted the '131 Patent had it known that the specification improperly added new matter, and the PTO would have found that the claims of '131 Patent do not satisfy the written description requirement because they are not supported by the specification of the parent (unmodified) application.

206. For all of these reasons, the '131 Patent is unenforceable.

### **FIRST DEFENSE**

Sprint has failed to state a claim upon which relief can be granted.

### **SECOND DEFENSE**

Defendants have not infringed and do not infringe, literally or under the doctrine of equivalents, any valid and enforceable claims of the '084 Patent, the '3,561 Patent, the '052 Patent, the '932 Patent, the '429 Patent, the '064 Patent, the '224 Patent, the '340 Patent, the '6,651 Patent, the '454 Patent, the '728 Patent, the '534 Patent, the '131 Patent, the '918 Patent, or the '463 Patent (collectively, the "patents-in-suit").

### **THIRD DEFENSE**

Each claim of the patents-in-suit is invalid for failure to satisfy one or more of the requirements of the Patent Act, 35 U.S.C. § 100, *et seq.*, including, but not limited to, the conditions of patentability set forth in 35 U.S.C. §§ 101, 102, 103, 112, and the doctrine of obviousness-type double patenting.

#### **FOURTH DEFENSE**

Sprint's claims for relief are barred, in whole or in part, by the doctrine of prosecution history estoppel and/or prosecution history disclaimer based on amendments, statements, admissions, omissions, representations, disclaimers, and/or disavowals made during prosecution of the applications leading to issuance of the patents-in-suit.

#### **FIFTH DEFENSE**

Sprint cannot satisfy the requirements applicable to its request for injunctive relief and has an adequate remedy at law. Sprint's claim for injunctive relief is therefore barred.

#### **SIXTH DEFENSE**

Upon information and belief, Sprint's claims for damages for purported patent infringement of the patents-in-suit are limited under 35 U.S.C. §§ 286 and 287.

#### **SEVENTH DEFENSE**

Defendants have not engaged in any conduct that entitles Sprint to attorneys' fees or costs.

#### **EIGHTH DEFENSE**

Sprint has failed to state a claim for willful infringement upon which relief can be granted. Sprint's willful infringement claims are based only on allegations of Paragraphs 39 and 40 of the Complaint, which are pleaded entirely "on information and belief" and, thus, should be disregarded. Moreover, Sprint does not allege knowledge of any specific patents-in-suit before the filing of its original complaint. Instead, Sprint generically alleges that "Sprint notified the Defendants that Sprint has a portfolio of over 120 U.S. voice over packet patents and that Sprint recently obtained a patent infringement verdict against Vonage's VoIP telephony product."

Complaint ¶ 39. Defendants have committed no wrongdoing or infringement, and Sprint has failed to plead and cannot show any willful infringement occurred.

#### **NINTH DEFENSE**

Sprint's claims for relief against Defendants for infringement of the patents-in-suit are barred, in whole or in part, by the equitable doctrines of waiver, estoppel, license, unclean hands, acquiescence, and/or exhaustion. For example, on information and belief, Sprint and Defendants (and/or their subsidiaries) have had a longstanding commercial relationship since at least before 2004 when Defendants (and/or their subsidiaries) entered into an agreement with Sprint related to certain telephony services. Upon information and belief, Sprint has known or should have known of the basis of its claims against Defendants (and/or their subsidiaries) for many years. Sprint's business dealings with Defendants (and/or their subsidiaries) coupled with Sprint's silence regarding Defendants' alleged infringement of the patents-in-suit and Sprint's unreasonable delay in filing suit against Defendants led Defendants to reasonably infer that Sprint did not intend to enforce the patents-in-suit against Defendants (and/or their subsidiaries). Defendants (and/or their subsidiaries) made multiple investments and other business decisions in reliance upon Sprint's misleading conduct and will be materially prejudiced if Sprint is allowed to proceed with its infringement claims. Accordingly, Sprint's claims for relief against Defendants for infringement of the patents-in-suit are barred, in whole or in part, by the equitable doctrines of waiver, estoppel, license, unclean hands, acquiescence, and/or exhaustion.

#### **TENTH DEFENSE**

Sprint's claims are barred because each Defendant does not make, use, or sell each claimed element of any asserted claim, nor does each Defendant direct or control another entity to make, use, or sell any element which is not made, used, or sold by Defendant.

### **ELEVENTH DEFENSE**

The '052, '932, '3,561, '6,561, '454, '084, '429, and '064, and '131 Patents are each unenforceable due to inequitable conduct committed by the patentee, the named inventors, the attorneys and agents who prepared or prosecuted the applications leading to the issuance of the patents, and/or other persons who were substantially involved in the preparation of the patent applications.

### **TWELFTH DEFENSE**

By reason of proceedings in the United States Patent and Trademark Office during prosecution of the patents-in-suit, and specifically statements, arguments, amendments, assertions, and/or representations made by or on behalf of the applicants for the patents-in-suit, Sprint is estopped from asserting that the claims of the patents-in-suit cover any product, method, or service of any Defendant under the doctrine of equivalents.

### **THIRTEENTH DEFENSE**

Sprint is barred from asserting one or more of the patents-in-suit under the doctrine of collateral estoppel.

### **ADDITIONAL AFFIRMATIVE DEFENSES**

Defendants reserve the right to assert other affirmative defenses as they may discover or appreciate during this proceeding.

### **JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Defendants demand a jury trial on all issues so triable.

### **RESPONSE TO SPRINT'S PRAYER FOR RELIEF**

Wherefore, Defendants respectfully requests that judgment be entered in their favor and against Sprint, as follows:



- A. An order dismissing Sprint's Complaint with prejudice in all respects;
- B. A judgment that each Defendant is not and has not infringed (directly and/or jointly) any claim of the patents-in-suit;
- C. A judgment that each Defendant is not and has not willfully infringed any claim of the patents-in-suit;
- D. A judgment that each of the claims of the patents-in-suit is invalid;
- E. A judgment that each of the claims of the patents-in-suit is unenforceable;
- F. An order denying Sprint's request for damages under 35 U.S.C. § 284, including any pre-judgment and post-judgment interest;
- G. An order denying Sprint's request for any costs and expenses in this action under 35 U.S.C. § 285;
- H. An order denying Sprint's request for a permanent injunction;
- I. An order denying Sprint's requests to declare this is an exceptional case, award treble damages, and order Defendants to pay Sprint's costs of suit and attorneys' fees;
- J. An order awarding Defendants their costs associated with this action; and
- K. An order awarding Defendants such other relief as the Court may deem appropriate and just under the circumstances.

ASHBY & GEDDES

*/s/ Andrew C. Mayo*

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